

REMARKS

Reconsideration and allowance of the above-identified application are respectfully requested. Claims 1-24 are currently pending.

Initially, Applicant notes with appreciation the Examiner's consideration of, and making of record the documents submitted with the Information Disclosure Statement.

The drawings stand objected to under 37 C.F.R. §1.83(a). Specifically, it is set forth that the feature of "emptying of the frame buffer after the still images are processed, transmitted or stored as claimed in claims 7 and 13" must be shown. Accordingly, a proposed amendment to the drawings is submitted herewith wherein Figure 4A is proposed to be amended to add the text "/EMPTY AFTER STILL IMAGE PROCESSED" to block 420.

The drawings stand further objected to under 37 C.F.R. §1.83(a) as allegedly failing to show the features of claim 18 and 19. With respect to claim 18, it is respectfully submitted that Figure 5 as originally submitted provides an illustrative example of the features of claim 18 including "wherein the video pipeline and the still image pipeline use separate image sensors and separate hardware processing pipelines". Should the Examiner maintain this objection, he is respectfully requested to identify precisely which feature of claim 18 is unillustrated. With respect to claim 19, Applicant submits herewith a new Figure 6 which illustrates an example of that which is claimed in amended claim 19, i.e., "wherein the video pipeline and the still image pipeline use the same image sensor and separate hardware processing pipelines." No new matter has been added. Upon approval of the proposed drawing changes, formal drawings incorporating same will be submitted. Accordingly, reconsideration and withdrawal of the objections to the drawings are respectfully requested.

Claim 18 stands rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to meet the written description requirement. Initially, it is noted that claim 18 is an originally filed claim. There is a strong presumption that written descriptive support exists for originally filed claims (*see MPEP 2163.03*), i.e., because at a minimum an originally filed claim itself provides evidence that an Applicant was in possession of the claimed combination at the time the application was filed. In this particular situation, the Office

Action indicates a concern that a portion of the specification is inconsistent with claim 18. More specifically, the Office Action indicates that the combination of claim 18 is inconsistent with the sentence found on page 7, lines 19-20 of the specification. This portion of the specification recites that: “[w]ith separate hardware processing pipelines, no interference exists, therefore no large frame buffer is needed” (emphasis added). This portion of the specification does not require that separate hardware processing pipelines be employed without any frame buffer. Instead, the undersigned respectfully submits that this portion of the specification merely indicates that the usage of separate hardware processing pipelines can result, for example, in a smaller frame buffer being employed in image processing. It is further submitted that, therefore, the specification is not inconsistent with claim 18’s recitation of separate hardware processing pipelines in combination with a frame buffer. Accordingly, reconsideration and withdrawal of this ground of rejection are respectfully requested.

Claims 1-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Published Patent Application 2002/0024602 to Juen. Prior to discussing this ground of rejection in detail, a brief summary of methods and apparatuses for concurrently acquiring, processing and transmitting digital video and still images according to exemplary embodiments of the present invention is provided below to highlight some of the advantageous characteristics thereof.

According to exemplary embodiments of the present invention, a dual pipeline architecture provides for concurrent processing of (1) video frames and (2) still images. The dual pipeline architecture may include a video pipeline optimized for digital video and a still image pipeline optimized for high resolution digital still images. When a still image is desired, the video frames can be temporarily buffered while the still image is being acquired. As a result, high resolution still image photographs maybe acquired without any interference with the video recording or any impact on the quality of the video or the still image photographs.

In the Office Action, reference is made to Figure 5 of the Juen patent application. The electronic camera illustrated therein, by way of contrast, is based upon an architecture wherein a still image is buffered while video frames are processed. See, for example,

paragraph [0051] of Juen wherein it is stated that “..the buffer means 5 ..temporarily stores the image information from the imaging means 1 upon receipt of the command for recording still images when the command for recording is given ...[t]he image compression means 7 waits for completion of recording by the moving image recording means 3 and compresses the image information stored in the buffer means 5.” Thus, unlike exemplary embodiments of the present invention, the cited portion of Juen temporarily stores still image data while processing video image data as opposed to temporarily storing video image data while processing still image data.

This difference between Juen and the claimed combination is recognized in the Official Action. For example, in rejecting claim 1, the Official Action refers to the afore-described functionality of Juen and states that “[i]t would have been obvious to one of ordinary skill in the art to have buffered the video data while recording the still image data and then resumed the video data recording in order to keep the buffer size small while being able to record many still images during video recording.” The undersigned respectfully submits, however, that there is no teaching in Juen or elsewhere which would have motivated one of ordinary skill in the art to modify the electronic cameras described therein in such a manner to arrive at the claimed combinations. More specifically, the only teaching that it might be desirable to buffer the video image data instead of the still image data is found in the present specification. To the contrary the system of Juen operates in substantially the opposite manner as the claim 1 combination by opting to buffer the still image data instead of the video recording data.

Accordingly, reconsideration and withdrawal of this ground of rejection are respectfully requested. Similar comments apply to the independent claim 10 and 20 combinations.

With respect to dependent claims 2-5, it is noted that the Official Action has taken Official Notice that the claim elements set forth therein are “extremely well known” for a particular purpose and that, therefore, it would have been obvious to add those elements to the system of Juen. It is respectfully requested that, should these grounds of rejection be maintained, the Examiner provide a reference which specifically teaches the features for which Official Notice is taken, both for these claims and any other claims in this application.

More specifically, even if the elements are shown to be *per se* well known, the undersigned would like to have a full and fair opportunity to review the teachings of the cited references to evaluate whether or not it would have been obvious to one of ordinary skill in the art for such teachings to be combined with the teachings of Juen in the manner needed to arrive at the claimed combinations. It is respectfully submitted that, even if claim elements are themselves known in the art, this does not immediately give rise to the conclusion that it would have been obvious to modify another document (in this case Juen) to incorporate such elements. Similar comments apply to claims 12, 15 and 16. Accordingly reconsideration and withdrawal of the rejection of these dependent claims under §103 over Juen in view of Official Notice are respectfully requested.

With respect to claim 18, it is noted that the preamble of the rejection refers to all of claims 1-20, but that there is no individual rejection of claim 18 under 35 U.S.C. §103 in view of Juen. This is not surprising since it is respectfully submitted that Juen neither teaches nor suggests the combination including wherein the video pipeline and the still image pipeline use separate image sensor and separate hardware processing pipelines as set forth in the claim 18 combination.

For at least the foregoing reasons, it is respectfully submitted that the claims are patentably distinguishable from the Juen patent publication. If the Examiner has any questions regarding the foregoing, he is invited to contact the undersigned at (540)-361-1863 to expedite prosecution of this application.

Respectfully submitted,

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